

The points of criticism raised are relatively minor, and such shortcomings will not detract seriously from the value of this comprehensive work on the basic aspects of medical mycology. This manual is recommended to the serious student. It is regrettable that its usefulness will be limited only to those with a good reading knowledge of Italian.

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Low Temperature Physics and Chemistry. Proceedings of the Fifth International Conference on Low Temperature Physics and Chemistry. Joseph R. Dillinger, Ed. University of Wisconsin Press, Madison, 1958. xxv + 676 pp. \$6.

In late August 1957 the University of Wisconsin was host to 440 scientists at the Fifth International Conference on Low Temperature Physics and Chemistry. With the exception of those in Soviet Russia, most of the active cryogenic laboratories in this country and abroad were represented, and the lively sessions covered a sizable fraction of the problems of current interest in this field. This volume, which includes a three- to four-page version of each of the 198 contributed papers and slightly longer reports of the 27 invited papers, provides not only an unusually complete summary of the conference proceedings but a highly valuable progress report on a popular field of research.

About a third of this book is devoted to the behavior of liquid He^4 , liquid He^3 , and liquid $\text{He}^3\text{-He}^4$ mixtures, sometimes called quantum liquids. Superconductivity, including applications of superconducting switches and persistent currents to computing machines, is thoroughly discussed. The following topics are also covered: temperature scale and temperature measurement, transport properties in solids at low temperatures, specific heats, mechanical properties of solids and solidified gases at low temperatures, magnetic properties, nuclear and paramagnetic resonance, and nuclear orientation experiments. The broad range of topics reflects the growing interest in the behavior of matter near the absolute zero of temperature.

Since much of the material in this book is not yet available elsewhere, this is an essential reference volume for active research workers in the field and should be of interest to a somewhat wider audience.

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Cerenkov Radiation and its Applications.

J. V. Jelley, Pergamon, New York, 1958. x + 304 pp. Illus. \$10.

By a happy coincidence Jelley's monograph became available almost simultaneously with the announcement of the award of the 1958 Nobel Prize for physics to P. A. Cerenkov, I. M. Frank, and I. E. Tamm for their pioneering work on the "Cerenkov effect." Jelley has written a timely, authoritative, and very complete account of the discovery, properties, and applications of this interesting phenomenon.

In the introduction the work of these three Russian physicists is given perspective within the framework of earlier experiments (the observation of Cerenkov radiation dates back almost to the discovery of radioactivity), and the credit reflected by the Nobel award is undisputed. It is interesting to note, however, that the contribution made by S. I. Vavilov, Cerenkov's professor at the Lebedev Institute, which is inconspicuous both in Jelley's review and in the literature, has been emphasized lately by the adoption in the U.S.S.R. of the more inclusive name "Vavilov-Cerenkov effect."

After a summary of the theory of "ordinary" Cerenkov radiation, a long and fascinating chapter describes many of the more exotic circumstances in which the radiation may be emitted. In some of these cases the phenomenon is potentially useful; in others it is quite unobservable. A large part of the volume is of course concerned with the practical detection of charged particles and the determination of their velocities. There is a comprehensive review of the types of counter that have already been used and of their advantages, and some hints are given of future possibilities.

One property of the Cerenkov counter that is surely destined to be exploited further is its inherent speed, and one would perhaps like to have seen more discussion of the speed of the photomultiplier which sets the practical limit in this direction. A more trivial omission is a sketch of the DuMont box dynode structure, which would have completed the set of illustrations of various basic designs. Again, one might quarrel with the statement that only the measurement of Cerenkov angle with the focusing type counter is useful for the direct determination of velocity. If the angular divergence of the particle beam becomes sufficiently large, there comes a point where better velocity resolution is achieved by measuring intensity, and to this end I have used nonfocusing counters successfully in cosmic-ray experiments.

Such shortcomings detract little, however, from the value of this book, which manages to combine very satisfactorily an introduction to the subject for the uninitiated with reference material for

the expert. Included are many useful tables and graphs and a comprehensive list of references that is especially to be praised for its coverage of the extensive Russian literature. The care with which the volume has been edited is shown by the fact that I found only one typographical error. It occurs on page 157 and is sufficiently obvious to be harmless.

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International Bibliography of Social and Cultural Anthropology. vol. 1. Prepared by the International Committee for Social Sciences Documentation. Georges Balandier and J. F. M. Middleton, Eds. United Nations Educational, Scientific, and Cultural Organization, Paris, 1958 (order from UNESCO Publications, 801 Third Ave., New York 22). 259 pp. \$5.50.

Publication of the *International Bibliography of Social and Cultural Anthropology* is a part of the general program of the International Committee for Social Sciences Documentation—a committee formed in 1950 with UNESCO support. The purpose of the committee is to promote the development of all bibliographical and documentary work of interest to the social sciences. The committee is made up of representatives of the various disciplines, nominated by the international scientific associations—the International Social Science Council, the International Sociological Association, the International Economic Association, the International Political Science Association, the International Association of Legal Science, the International Union of Scientific Psychology, the International Federation for Documentation, and the International Federation of Library Associations.

The committee considers that its main task is to supply each social science discipline with the basic bibliographical work essential to it. In certain fields it seemed essential to create annual international bibliographies; the *International Bibliography of Social and Cultural Anthropology* is one such bibliography.

It is the aim of the committee to record all publications concerned with the discipline, whatever the country of origin of the publication or the language in which it is written. They seek to list all scientific publications—books, articles in periodicals, reports distributed in duplicated form—but they exclude unpublished works (for instance, theses which have been merely typed), articles appearing in the daily press, and so forth. Special attention is paid to official publications of governments.

The classification scheme of the bibliography is as follows: "Anthropology: general studies"; "Material and methods of anthropology"; "Morphological foundations"; "Monographs"; "Social organization and social structure"; "Religion, magic and witchcraft"; "Problems of knowledge, arts and science"; "Statics and dynamics of social and cultural systems"; and "Applied anthropology."

An author index and two subject indexes (English and French) are included.

Environmental Conservation. Raymond F. Dasmann. Wiley, New York, 1959. x+307 pp. Illus. \$6.50.

Recent books on conservation have fallen into two types: those of the "plundered planet" school, which view our future with alarm (as well they should), and the bulky textbooks loaded with tables, graphs, and other paraphernalia that encourage only the fragmentary reading of assigned pages by students in a course.

This book—a vigorous hybrid—is a concisely stated, well-written textbook for college courses in conservation that should at the same time appeal to non-professional readers. The text is so clear that the book could also be read by high-school students and by small-town, conservative newspaper editors. The basic theme, as indicated by the title, is that conservation is not a matter of water, trees, or petroleum but of entire environments—of ecosystems. The traditional separation into the various aspects or resources is followed in chapter arrangements as a matter of convention, but the integrating role that conservation practice should play in our modern culture is never lost sight of.

It is all too easy for conservationists to become strident—remembering the land in the kindness of its youth, in the wilderness before it was yet sown—for like Jeremiah they have the true vision of our doom. Dasmann is to be congratulated for the restraint with which he has handled these matters. He writes soberly of the problem of Los Angeles but leaves the reader to conclude for himself how badly out of balance this city is in an ecological sense (some of us would be tempted to call it an ecological cancer), and he poses the problem of population increase in his concluding chapters in such a way that the student will realize that what is really needed is hard, sober thought. We have still a distance to travel before a thoughtful person who takes the position that economic and population growth are not necessarily good things in themselves is not regarded in many communities as an op-

ponent of "progress," if not a nature-loving crackpot, but books like this should, if time is still with us, help to create a more thoughtful climate for the conservation of our environment. Students are as allergic to sermons as are chambers of commerce, and the author has obviously been aware of this in writing his book. The result is a text that deserves wide usage, and one that will serve almost equally well as an introduction to ecology or to conservation.

The book is well illustrated, with many fine photographs (although a few have inevitably lost contrast in reproduction); there are excellent lists of chapter references and an 11-page index. It is also compact and has an attractive cover—features which should encourage its possessors to carry it about in preference to their bulkier textbooks for less essential courses.

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Miscellaneous Publications

(Inquiries concerning these publications should be addressed, not to Science, but to the publisher or agency sponsoring the publication.)

An Analysis of Mixtures of Volatile Substances. Annals, vol. 72, art. 13, Emil F. Williams, Ed. 215 pp. \$4. *Quantum Aspects of Catalysis: the Drying of Lined Oil.* Annals, vol. 79, art. 1. Raymond R. Myers. 8 pp. \$0.50. New York Acad. of Sciences, New York, 1959.

Ataractic and Hallucinogenic Drugs in Psychiatry. WHO Tech. Rept. Ser. No. 152. 72 pp. \$0.60. *Introduction of Radiation Medicine into the Undergraduate Medical Curriculum.* WHO Tech. Rept. Ser. No. 155. 24 pp. \$0.30. *Expert Committee on Training of Health Personnel in Health Education of the Public.* WHO Tech. Rept. No. 156. 40 pp. \$0.30. World Health Organization, Geneva, 1958 (order from Columbia Univ. Press, New York.)

Blue-Green Algae from the Middle Devonian of Rhynie, Aberdeenshire. Bulletin, Geology, vol. 3, No. 10. William N. Croft and Eric Alan George. 14 pp. 8s. *A Study of the New Zealand Chironomidae (Diptera, Nematocera).* Bulletin, Entomology, vol. 7, No. 9. Paul Freeman. 44 pp. 12s. 6d. British Museum (Natural History), London, 1959.

Development and Structure of the Frog. A photographic study. Addison E. Lee, Earl R. Savage, W. L. Evans. Rinehart, New York, 1959. 44 pp. \$1.

Diseases of the Colon and Rectum. vol. 2, No. 1. Louis A. Buie, Ed. Lippincott, Philadelphia, Pa., 1959. 158 pp.

Federal Grants and Contracts for Unclassified Research in the Life Sciences. Fiscal year 1957. National Science Foundation, Washington 25, 1958. 321 pp.

First Annual Texas Conference on the Utilization of Atomic Energy. Proceedings. A&M College of Texas, College Station, 1958. 60 pp.

Free-Living Nematodes and Other

Small Invertebrates of Puget Sound Beaches. Wolfgang Wieser. Univ. of Washington Press, Seattle, 1959. 189 pp. \$4.

Furbearers in Kansas: a Guide to Trapping. Howard J. Stains and Rollin H. Baker. State Biological Survey and Museum of Natural History, Univ. of Kansas, Lawrence, 1958. 100 pp. \$0.50.

A Further Study of Micronesian Polyclad Flatworms. No. 3410. Proceedings of the U.S. National Museum, vol. 108. Libbie H. Hyman. Smithsonian Institution, Washington, D.C., 1959. 54 pp.

Genetics Laboratory Guide. David J. Merrell. Burgess, Minneapolis 15, 1959. 32 pp. \$1.50.

The Geology and Mineral Resources of Athens County, Ohio. Bulletin 57. Myron T. Sturgeon. Div. of Geological Survey, State of Ohio, Columbus, 1958. 600 pp. \$3.

Librarian of Congress, Annual Report of. For the fiscal year ending 30 June 1958. Library of Congress, Washington, D.C., 1959 (order from Supt. of Documents, GPO, Washington 25). 179 pp.

Nourishing Brain Cells. C. E. Lumsden. Leeds Univ. Press, Leeds, England, 1959. 23 pp. 2s. 6d.

Preparing Climatic Data for the User. Tech. Note. No. 22. H. E. Landsberg. 19 pp. F. 4. *Meteorology as Applied to the Navigation of Ships.* Tech. Note. No. 23. 26 pp. F. 4. *Turbulent Diffusion in the Atmosphere.* Report of a working group of the Commission for Aerology. Tech. Note No. 24. C. H. B. Priestley, R. A. McCormick, F. Pasquill. 68 pp. F. 7. World Meteorological Organization, Geneva, Switzerland, 1958.

Promising Practices in Nutrition Education, in the Elementary School. Willard J. Jacobson, Fannie Lee Boyd, Mary M. Hill. Bureau of Publications, Teachers College, Columbia Univ., New York, 1959. 54 pp. \$1.

Research in Space Science. Special Rept. No. 19, 20 pp.; Special Rept. No. 20, 46 pp.; Special Rept. No. 21, 37 pp. Smithsonian Institution, Astrophysical Observatory, Cambridge, Mass., 1959.

Safflower Trials in Australia. Division of Plant Industry Tech. Paper No. 11. B. Horowitz and C. R. Kleinig. Commonwealth Scientific and Industrial Research Organization, Melbourne, Australia, 1958. 19 pp.

Social Science Research Council, Annual Report 1957-1958. The Council, New York, 1959. 100 pp.

Studies on Fishes of the Family Characidae. No. 16. A new *Hyphessobrycon* from Costa Rica. Bulletin of the Florida State Museum, Biological Sciences, vol. 3, No. 4. James E. Bohlke. Univ. of Florida, Gainesville, 1958. 8 pp. \$0.14.

The Supervisor of Mathematics, His Role in the Improvement of Mathematics Instruction. Natl. Council of Teachers of Mathematics, Washington 6, 1959. 10 pp. \$0.15.

*Three New Skinks Related to *Sphenomorphus variegatus* (Peters).* Fieldiana: Zoology, vol. 39, No. 24. Robert F. Inger. Chicago Natural History Museum, Chicago, Ill., 1958. 11 pp. \$0.30.